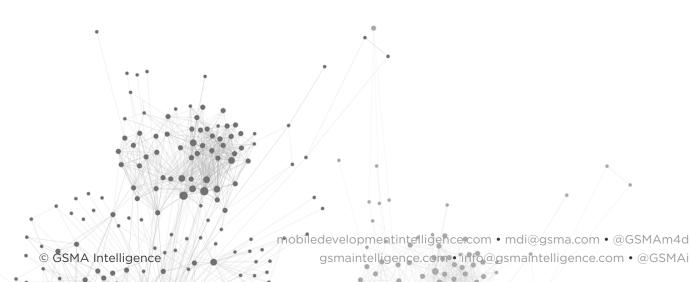


# **ANALYSIS**

# Country overview: Sri Lanka

Mobile for Development

October 2013



## **Contents**

National Context	1
Key Messages	2
The Sri Lankan Mobile Market	4
Small market, many players	4
Smartphone ownership still low, but data is key	6
Mobile for Development Landscape	
Mobile for Development services growing	10
Strong push from MNOs, grants and competitions nurturing the ecosystem	10
Mobile for Development: the operator perspective (interview with Dialog CEO)	13
Sri Lanka - attractive for start-ups, still need financing	
Appendix	18
Glossary	22

#### **National Context**

Sri Lanka is a small island nation covering approximately 66,000 km² in the Indian Ocean, offering access to Asia and the Middle East. The majority of its 21 million people live in the rural areas; urban residents account for just 15% of total population. Government investments in basic and Information Communication Technology (ICT) education have ensured relatively high reading and ICT literacy rates. The World Bank has sponsored an \$83 million program, 'e-Sri Lanka', which seeks to improve access to ICT in the country and enable the use of these technologies to aid economic and social development. The e-Sri Lanka initiative has been implemented by the Information and Communications Technology Agency (ICTA) of Sri Lanka which has played a significant role in leading government policies, launching ICT-related products and services, and in encouraging entrepreneurship in this sector.

The 26-year long internal conflict, which officially ended in 2009, displaced economic development away from the war-affected areas and exacerbated regional disparities in income, employment and healthcare. The worst-affected regions in the North and Eastern provinces are in need of socio-economic rehabilitation. Civil unrest also forced a number of Sri Lankans to emigrate and despite the end of the conflict; many remain abroad for economic reasons. The diaspora population is estimated to be three million and their remittances are the second largest source of foreign exchange earnings for the country.

Sri Lanka's \$64 billion economy is poised for a steady economic rebound in the next three to five years. According to the International Monetary Fund (IMF), the economy expanded 6.4% in 2012 and is forecast to grow by 6.3% and 6.7% in 2013 and 2014 respectively. The service sector accounts for almost 60% of the economy, while agriculture and manufacturing also make significant contributions. There is a strong push to develop ICT capabilities through investment in infrastructure and ICT education in order to position Sri Lanka as a knowledge and outsourcing hub in order to bring in foreign revenue.

1

### **Key Messages**

#### Fast growing mobile market, still headroom for more

Around 45-50% of people in Sri Lanka own a mobile phone now. Although this is higher in comparison to South Asia (30%) and the developing world (40%), mobile ownership in Sri Lanka is well below that in mature markets which typically see rates of 60-80%. Over the last five years, subscriber growth in Sri Lanka has been driven by a combination of three factors – (i) increasing household incomes, with GDP per capita increasing 12% per year from 2009–12, (ii) expanded mobile network coverage with as much as 90% of the population now covered by 2G networks and 70% by 3G, and (iii) increasing competition between the mobile operators which has had a knock-on effect in lowering prices for consumers.

There is still headroom for subscriber penetration in the country. On the face of it, the bulk of this growth would come from closing the urban-rural divide - current mobile ownership is around 53% in urban cities as compared to 42% in rural areas. Given that the majority (85%) of the population resides outside of cities, even if rural ownership plateaued at 50%, this still implies an incremental rise of 1.2 million people based on current levels. While coverage not-spots and digital literacy are barriers to this, we believe affordability, especially in rural areas, also presents a considerable challenge. Rural households have fewer income earners (1.7 versus 1.9 in cities) while their household incomes are 25% lower than those in urban areas¹.

#### Mobile data is the story

Although sales of smartphones are increasing, they account for just 10% of total handset sales implying relatively low smartphone ownership in the installed base of mobile phone users. Interestingly, mobile data use is rising - with over one million active mobile internet users in the country<sup>2</sup>. Much of this increased internet access is coming from prepaid usage on feature phones. Moreover, operators are designing short-term, flexible tariffs in order to enable and promote mobile data among mid and low- income customer segments who are otherwise unable or unwilling to enter monthly contracts.

Operators are also investing capex on networks to counter anticipated rises in data traffic. Overall usage intensity (the amount of bandwidth consumed per data customer) is generally lower in Sri Lanka than it is in developed markets – social networking is a common use case in Sri Lanka as well. We expect this to grow with increasing utility of the mobile internet, principally video-based applications such as You Tube etc. The pace of change will depend on overcoming usage barriers for would-be data customers, including costs of both handsets and airtime, as well as accessibility of locally relevant content.

#### Mobile for Development (M4D) is business, not CSR

Mobile for Development Intelligence (MDI) now tracks around 30 M4D services in Sri Lanka - double the number three years ago. A majority of these services are led by mobile

<sup>&</sup>lt;sup>1</sup> Household income and expenditure survey - 2012/13, Department of Census and Statistics

<sup>&</sup>lt;sup>2</sup> Statistical Overview June 2013, Telecom Regulatory Commission of Sri Lanka

operators and operate in the health and education sectors. While M4D services are rooted in social impact, there is an increasing shift in the mindset of operators towards investing in value added services (VAS) as core business lines (Dialog is a case in point – see special spotlight with Dialog's CEO in the Mobile for Development Landscape section). Direct revenue generation is one motivation, but we believe the more important reason is to use these services as a tool to secure the loyalty of customers in an increasingly data-led ICT world with competition from mobile operators and internet firms (namely Google and Facebook).

This is not lost on policy makers. The government has been recognised for its high emphasis on ICT innovation (with a duly strong standing on the impact of ICT on access to basic services) and has improved on the international benchmark for the ease of doing business (see appendix). However, venture capital availability remains low relative to regional and developed world peers. The alignment of entrepreneur business models and investor valuation criteria remains a barrier to the sustainability of what is now a budding innovation hub.

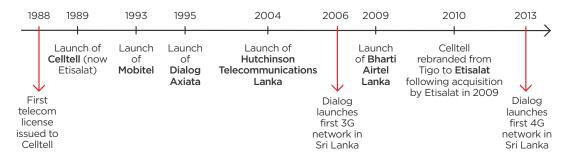
#### The Sri Lankan Mobile Market

2011	2012	2013E
41%	43%	46%
8.6	9.3	9.9
7%	8%	7%
93%	105%	117%
1.95	2.02	2.07
\$5.60	\$6.10	-
4%	8%	-
15%	16%	-
36%	33%	-
	41% 8.6 7% 93% 1.95 \$5.60 4% 15%	41%       43%         8.6       9.3         7%       8%         93%       105%         1.95       2.02         \$5.60       \$6.10         4%       8%         15%       16%

Table 1: Sri Lanka, key mobile indicators

Source: GSMA Intelligence, MDI analysis

#### Mobile network operators launch timeline



### Small market, many players

The mobile space is occupied by five operators including a state owned provider (Mobitel). Dialog remains the largest player with around a third of the market, although this has weakened over the last three years, largely due to competition from Etisalat and Hutchison (see Figure 1). Indeed, the overall market is more competitive than many of its regional peers (see Figure 2), which is enhanced given the relatively small population of around 21 million.

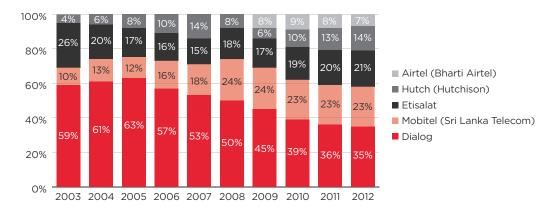
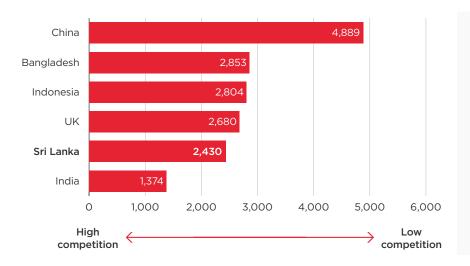


Figure 1: Operator market share evolution (connections)

Source: GSMA Intelligence, MDI analysis



The HHI is a measure of competition: it takes the sum of the squared market share held by each mobile operator in a country, giving a maximum country value of 10,000

Higher values indicate a larger concentration of share held by one or two operators, which generally indicates a lower level of competition

Figure 2: Herfindahl-Hirschman Index of competition, Q2 2013

Source: GSMA Intelligence, MDI analysis

Mobile revenue growth has grown healthily at around 16% over the last several quarters, with this now driven both by new subscribers and firmer prices (see Figure 3). The spectre of price wars has been absent over the last year, although the market has in the past been prone to these; during 2008–2010, downward pressure on tariffs led to a fall in profits and a decline in investments for the industry as a whole. In order to ensure quality and fair competitiveness, the telecoms regulator, Telecom Regulatory Commission, introduced a minimum floor for on-net charges as well as fixed interconnection charges.

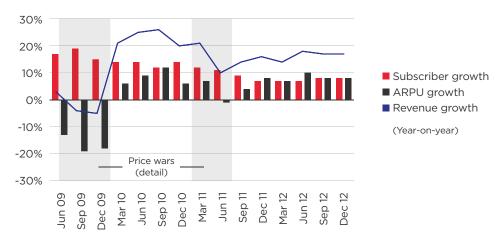
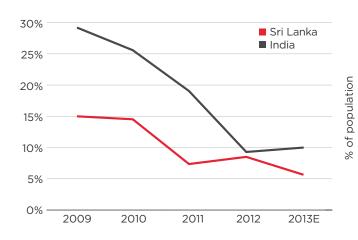


Figure 3: What drives mobile revenue growth?

Source: GSMA Intelligence, MDI analysis

Note: Revenue growth corresponds to recurring (e.g. service) revenue Subscribers correspond to unique subscribers rather than total number of SIMs, i.e. connections

After a period of declines, growth in active subscribers has stabilised since 2011. Mobile penetration on an ownership basis has still not reached 50% nationally, and there remains a large urban-rural divide, with rural areas – 85% of the country's population – largely untapped despite having relatively good coverage (see Figures 4 and 5). The end of the civil war has released pent up, yet largely unfulfilled demand from the war-affected North and East provinces which account for around 14% of the country's population.



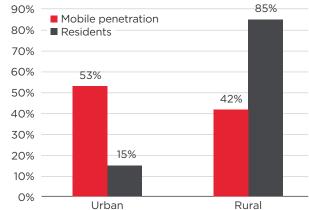


Figure 4: Growth in active subscribers Source: GSMA Intelligence, MDI analysis

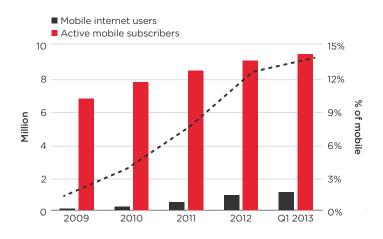
**Figure 5:** Mobile penetration: urban vs. rural *Source: GSMA Intelligence, MDI analysis* 

Note: Mobile penetration refers to unique subscribers (lower than on a connection/SIM basis)

#### Smartphone ownership still low, but data is key

#### Mobile data is the story

An increasing number of Sri Lankans are beginning to use their mobile phones to access the internet. Since 2009, mobile internet users have almost doubled each year, reaching over 1 million during the first quarter of 2013 (Figure 6). We expect this trend to accelerate over the next two to three years based on the government's emphasis on IT literacy, use of short term/flexi options catering to lower income customers unable to commit to a contract (see below), and sustained marketing by telecom operators seeking to establish data as a strong source of revenue.



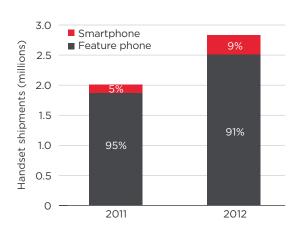


Figure 6: Active subscribers and internet users

Figure 7: Handset shipments

Source: GSMA Intelligence, Telecom Regulatory Commission of Sri Lanka, Sri Lanka Mobile Handset Market Review 2011-12, CyberMedia Research

Note: Figure 7 shows handsets tracked by CyberMedia Research in its Mobile Handset Market Review 2011–12. Handsets traded on the 'grey' market are outside of that analysis and are estimated to account for 18% of the handset market.

In the handset space, feature phones continue to account for the vast majority (over 90%) of shipments (see Figure 7). Smartphones are rising, but the time taken for the handset replacement cycle means that their share in the actual user base is lower (perhaps 5%). Samsung and Nokia are the largest handset players in feature phones and smartphones (together making up around 50% of sales), with a long tail of feature phone makers comprising the remainder (see Figure 8).

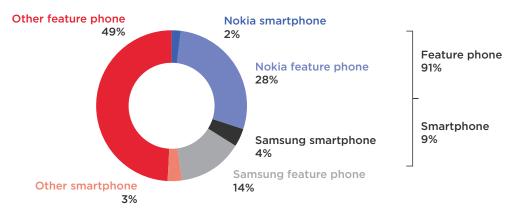


Figure 8: Handset sales share (2012)

Source: Sri Lanka Mobile Handset Market Review 2011-12, CyberMedia Research

Note: Figure 8 shows handsets tracked by CyberMedia Research in its Mobile Handset Market Review 2011–12. Handsets traded on the 'grey' market are outside of that analysis and are estimated to account for 18% of the handset market.

Looking ahead, we expect smartphone adoption to continue rising, driven by falling device prices, increasing 3G coverage (see Figure 9) and operator marketing. Indeed, Dialog launched two own-brand budget smartphones in 2012 running on Android at sub-\$100 price points. Operator investment is targeted on networks to pre-empt the rise in traffic associated with more users and higher intensity usage (mainly video – see Dialog's capex intensity, Figure 10).



Figure 9: Network coverage - Hutchison (2G) and Mobitel (3G)

Source: GSMA, Collins Bartholomew

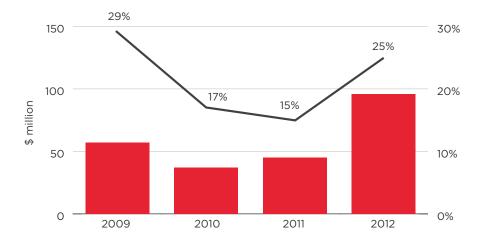


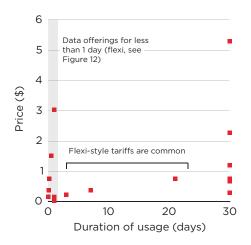
Figure 10: Capex evolution (mobile operations), Dialog Sri Lanka Source: GSMA Intelligence, company reports, MDI analysis

#### Consumers are using data on short-term flexi tariffs

Current mobile internet penetration implies that at least half of the population is accessing the internet through feature phones. As with many regional peers, mobile represents the gateway to the internet for most of the population given the relatively low use of fixed broadband. Operators recognise this as a crucial lock-in mechanism, and are directing efforts focused on creating a locally valued data application ecosystem by encouraging developers to launch a variety of VAS hosted on their networks (see Section 2: Mobile for Development (M4D) landscape).

Sri Lanka (along with many other developing markets) has aligned mobile data access to the handset landscape (mostly feature phones), digital literacy ('SpotTheVanLK', a marketing campaign launched by Etisalat, involves a mobile van of 'internet experts' which tours the country to answer any questions about internet, smartphones and mobile apps) and the buying power of mid and lower income customers unable or unwilling to commit to monthly contract expenditures. In other words, the use of pre-pay mobile data is itself a conduit to smartphones as real incomes rise and device prices fall. We estimate that around 75% of people using data do so on prepaid plans, with many of these accessing the internet by the day or hour (see Figures 11 and 12). The use of flexi plans has also become common, where an individual can, say, purchase 5 hours of time on the mobile internet that can be used at any point over a 5 day period. Lastly, the use of zero-rated offers has come into play in partnership with internet firms. Here, customers are given free access to a limited part of the internet, with browsing or activity beyond this charged (one example is Wikipedia offered by Dialog).

In many ways, this is the opposite of the European and US story. Operators attempted, and mostly failed, to create walled gardens of content through the 2000s before smartphones became mainstream; over the last 5 years the mobile internet and more open content ecosystems have become a de facto use case for smartphones, with most of this on contract plans – in other words, user-centric smartphones – starting with the iPhone – were the gateway to mobile data.



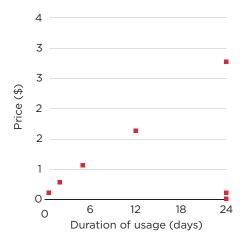


Figure 11: Mobile data tariff landscape

Figure 12: Short term/flexi data tariffs

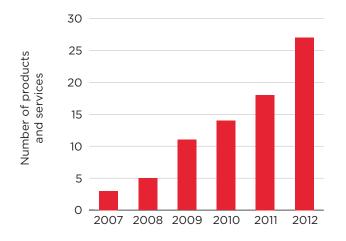
Source: Operator websites (as of 21 August 2013), \$1 = 131.9 LKR

Note: Data tariffs generally include a bundle of data that can be used for mobile internet browsing, watching video or both

### Mobile For Development Landscape

#### Mobile for development services growing

Overall, the number of M4D service offerings has steadily increased during the last few years, with over 30 services now tracked by the MDI Products and Services tracker (see Figure 13). Health and learning related services account for the largest share with around two thirds. Identity (e.g. GovSMS) and agriculture-related offerings (primarily mobile services that provide live crop prices to farmers in remote areas) each make up around 10% (see Figure 14)<sup>3</sup>.



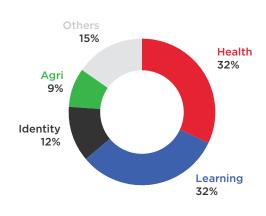


Figure 13: M4D evolution Source: MDI analysis

Figure 14: Sector comparison\*

Source: MDI analysis

#### Strong push from MNOs, grants and competitions nurturing the ecosystem

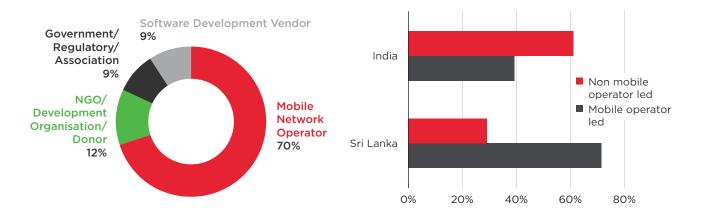
The majority (around 70%) of the products and services in Sri Lanka tracked by MDI are led by mobile network operators (MNOs) (see Figures 15 and 16). We believe this to be reflective of their push towards developing an ecosystem of VAS to differentiate their mobile services offering and promote data usage. Multiple operators in Sri Lanka offer a 70:30 revenue share in favour of the developer (similar to the app developer model employed by Apple and Google), an important hook in attracting talented entrepreneurs and developers to partner with operators. In a different part of the ecosystem, aspiring developers and university students are encouraged to showcase their creativity through regular competitions and technical training sessions (Sri Lanka has consistently sent the highest number of developers to Google Summer Code, a competitive program for students worldwide with an interest in software development, since its launch in 2005).

Operators are increasingly attracted to good business opportunities that also have the potential to generate social impact. In March 2013, Mobitel partnered with the Open

<sup>\*</sup> Based on number of M4D services in Sri Lanka, not on the number of customers using them Note: Other services include mobile money, entrepreneurship & work, disaster response, NFC and green powered networks

<sup>&</sup>lt;sup>3</sup> Note that the size of an M4D sector here is based on the number of services, as opposed to the number of subscribers or any financial metric (for which reported data is sparse)

University of Sri Lanka to promote financial literacy among rural women from farming communities. Weekly lessons are provided through an Interactive Voice Response (IVR) system followed by an assessment. Jean Fernandez, Senior General Manager, Customer Care, at Mobitel states that this programme will "help empower women from rural farming communities and add value to their daily work."



**Figure 15:** M4D product & services leader organisations *Source: MDI analysis* 

**Figure 16:** MNO-led products & services *Source:* MDI analysis

Despite its small market size, Sri Lanka has a relatively large number of M4D services compared to other fast growing developing countries (see Figure 17). While its mobile penetration (43%) is broadly on a par with the Philippines (46%), and Peru (50%), M4D services are more numerous in Sri Lanka than these comparator peers once corrected for size of the mobile market. This, of course, is not indicative of the number of customers using M4D services (for which there remains relatively little reported data). However, it does suggest there is a strong appetite among operators and entrepreneurs to invest in mobile-enabled services. The challenge is transitioning from growth in volume to growth in scale with sustainable customer bases.

At a sector level, much of this is focused on the mobile health and education sectors (with government placing a high emphasis on ICT literacy). Mobile money services are conspicuously underrepresented, with only one, eZ Cash<sup>4</sup> offered by Dialog, currently in the market, although we believe this to be more a product of the timeline for regulatory approval than lack of interest among operators (we understand two operators are planning to launch mobile money services within the next several months). Most of Sri Lanka's population lives in rural areas, with around 40% of adults either lacking a bank account or being inactive users of one (underbanked). A similar story holds for urban areas (see Figure 18). In both cases while there are mobile subscribers that will have existing bank accounts, mobile money can be offered to those that have mobile but not financial access, and to those with neither, using this as a draw to own a mobile itself.

<sup>&</sup>lt;sup>4</sup> See a <u>case study</u> by GSMA's Mobile Money for the Unbanked (MMU) programme

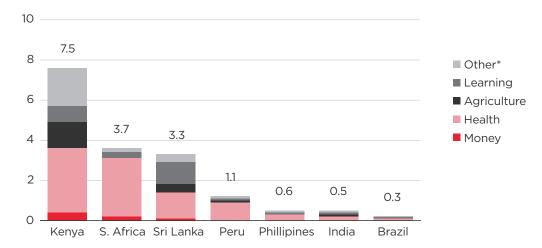


Figure 17: M4D services per million mobile unique subscribers

Source: MDI Products and Services tracker, MDI analysis

Note: Figures are derived from the number of products and services as tracked by MDI and the number of mobile unique subscribers calculated by GSMA Intelligence. The tracker is open to sampling bias geographically and by sector, and as such we make no claim to represent 100% of the M4D services in operation

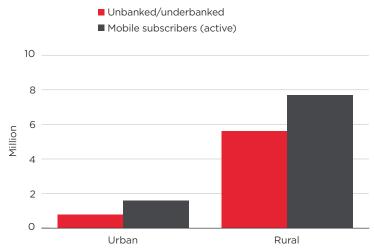


Figure 18: An opportunity for mobile money?

Source: World Bank, MDI analysis

Note: Unbanked/underbanked figures are for adults age 15 or over (2011), mobile subscribers are totals (2012)

<sup>\*</sup> Includes mobile-enabled services to disaster response, energy access, employment and green-powered networks (business facing)

#### Mobile for Development: the operator perspective

# Special feature: In conversation with Dr. Hansa Wijayasuriya, CEO, Dialog Sri Lanka

# How do you understand the term 'Mobile for development', and how is this relevant to Dialog's organisational structure and activity?

"The techno-economics that underpin modern connectivity technologies in general and mobile telephony in particular, have enabled the related technologies to act as transformational vehicles with the potential to deliver socioeconomic parity in emerging markets. Dating back to 1995, Dialog viewed mobile telephony as having immense potential to transform livelihoods by providing affordable and accessible connectivity, not only in terms of peer-to-peer communication but also as a digital bridge that could alleviate asymmetries in information, commerce, and knowledge. Spurred on by a series of positive outcomes in the form of sustainable business returns as well as larger socioeconomic dividends delivered via mobile telephony in Sri Lanka, Dialog has remained enthused and convinced that ICTs can indeed transform lives, livelihoods, and businesses, provided they are applied with close adherence to underlying principles of inclusion. In keeping with the potentially transformative role they could play in the development of nations, we see ICTs in their broadest context, including but not limited to being drivers of multi sector inclusion, globalization, electronic commerce and trade, efficient government, and plurality in access to broader opportunity and fundamental rights."

#### How much of your core business is represented by services we would call M4D services?

"In terms of direct contribution to topline M4D is still relatively small; however the attribution of incremental revenue through a M4D service that drives affinity and applicability among base of the pyramid user segments is more significant. This is still hard to measure and the metrics around attribution are very nascent. We continue to rely on consumer insight data to build attribution evidence to support scaling up investment across areas that present an opportunity for mobile intervention."

# Do you think that there is an issue here with the apparent disconnect between the developmental benefit of a given service and the revenue that the company generates?

"I feel that investments in applicability and relevance of M4D services, will deliver financial outcomes which are (a) more sustainable, and (b) more impactful from the view point of attribution through customer retention, mindshare and multiplier effects. A dollars and cents evaluation of this model is not dissimilar to the approach we adopt when valuing the equity of a Brand, and the returns on Brand Investments. Brand investments generate affinity and loyalty, so do investments in applicability and relevance, and even more so, investments in services which are life enhancing and "developmental "at an individual or societal level. Going back a decade, one might argue that the returns on such investments are both long term in nature as well as tenuous in terms of derivation. I believe this is no longer the case, affinity dividends are seen in the shorter term, and the attribution connectors that we can draw are far more deterministic.

With particular reference to mobile money and payments, we believe we have bridged the principal hurdle of bridging affinity gaps, and proving relevance to the community.

Accordingly we believe that we are now at the cusp of converting affinity and developmental value appreciation into the actualization of inclusive shared value delivery. We believe the immediate developmental multiplier of mobile money would be the emergence of cross-segment e and m commerce and downstream trade interchange. I believe this multiplier would also spawn the creation and adoption of context-sensitive mobile apps that target the base of the pyramid."

#### What do you see as the most promising M4D services in terms of business models?

"I would look at the gaps country-by-country. In a community or a country where there are asymmetries, if you pick the three most impactful asymmetries, and if you can bridge those three asymmetries using mobile, those would be the top three M4D services. In most emerging markets, including Sri Lanka these asymmetries are electronic transaction infrastructure, parity education, and the immediacy of health services. Taking the first of these for example, many emerging market consumers have no ability to transact on the internet because they are not empowered with an electronic payment instrument. This means that the Internet has limited relevance to such segments in terms of its transactional capacity. We believe that bridging these gaps will accelerate the transition from enablement to actualization of 'inclusive development'."

#### Sri Lanka — growing start-up ecosystem, still needs financing

The small geographic spread of the island allows for manageable roll-out of infrastructure, and reduces the cost of marketing and distribution of new products. A relatively small population of 21 million, which is increasingly becoming ICT savvy, also provides a good sample size to test commercial viability of products and services. Four out of five MNOs in Sri Lanka have a strong global footprint, creating the opportunity for them as well as their partners to pilot products in the Sri Lankan market with the potential of expanding to their global counterparts (see Start-up Spotlight on Square Mobile). Partnership with MNOs can also enable NGOs to pilot their social enterprise work and scale to a larger community (see spotlight on Sarvodaya-Fusion). At the policy level, this has been helped by an increasingly business-friendly environment, with Sri Lanka recognised for its relatively high emphasis on ICT and having improved its standing on the ease of doing business (see appendix). A key constraining factor remains the availability of venture capital (VC) financing, with a need for closer alignment between entrepreneur business models and the risk criteria applied to investment decision making by VCs and other investors (although we are beginning to see an uptick in activity including the launch of one of Sri Lanka's first early stage VC funds, Venture Engine and its offshoot, Lanka Angel Network in 2012).

# Start-up Spotlight: In Conversation with Tharindu Dessanayake, CEO, Square Mobile

Product name and sector: Word Puzzle, mLearning

Year Launched: 2011 Business Model: B2B

Targeted Device: Basic/Feature phone, Smartphone

Primary Delivery Technology: SMS

Products & Services: Education, Entertainment

Markets Deployed In: Asia, Africa

Estimated Number of Users: 5000 in Sri Lanka, 12000 in Nigeria

Word Puzzle is an interactive SMS based service which aims to improve the users English language vocabulary. The service is developed by a Sri Lankan start-up, Square Mobile and is currently offered through Etisalat in Sri Lanka and Nigeria. The first tri-lingual offering of its kind in Sri Lanka, Word Puzzle offers service delivery in two local languages Singhalese and Tamil. The service records each user's response to vocabulary based questions and then ranks users in comparison to other players. This creates healthy competition and provides an incentive to learning.

#### Progress since launch:

#### What's the story behind the Word Puzzle app and Square Mobile?

I developed Word Puzzle when I was in second year of college at University of Peradeniya. The idea came by chance when I participated in Etisalat's Appzone Champions competition in March 2011 and won the intra-university level. I was interested in their workshops on app development and decided to participate. The success of Word Puzzle after the competition boosted my entrepreneurial spirit and the exposure I received through the competition events led me to launch Square Mobile. Recently, the growth of smartphone penetration and mobile app development has been strong in Sri Lanka. The youth are keen to own a

smartphone and are buying new phones more frequently. So faster technology adoption is creating more business opportunities for companies like Square Mobile.

#### Scalability

#### How is this service being scaled to reach a larger audience?

Since our launch in 2011, we have increased our Sri Lankan subscriber base to 5000. We have been using LinkedIn to find and connect with potential partners abroad. Through LinkedIn, we found IntoMobile and partnered with them to launch operations in Nigeria in February this year. In Nigeria we are adding almost 300 subscribers per day and expect around 100,000 users in the next six months. We are scaling our business; we have expanded our team by three members and are moving into a new office in Colombo next year.

#### **Partnerships**

# What is the value of partnerships, particularly MNO's? What support did you receive from operators?

Sri Lanka proved to be a good launch pad for us. We started locally but we were always thinking of scale, and the global context. After our success at home, it was easier for us to launch the product in Nigeria. The Nigerian telco industry is boosting up now, so they are thirsty for value added services and feature phones are the most prevalent devices there. This means there is a good chance for SMS/WAP services like ours. We have partnered with IntoMobile in Nigeria and the product is hosted by Etisalat Nigeria. In Nigeria, Etisalat is providing free bulk promotion of our service amongst their subscriber base, whereas in Sri Lanka we have to pay for such mass marketing campaigns. We are also in talks to launch Word Puzzle in South Africa.

#### Looking back, looking forward

#### What are the internal and external challenges you have faced?

We faced some issues in setting up partnership agreements because we did not have any legal expertise. Lawyers are not only expensive but very hard to find for our field of operation (IT and communication). However, getting initial funding was the biggest challenge. There are very few funding opportunities in Sri Lanka. We raised some initial money from our friends and family, and since then the revenue from Word Puzzle has helped us sustain operations. We also got \$5000 from ICTA's Spiralation competition to develop a travel app. Before we were selected by ICTA it was hard to find mentors. There is no ecosystem for start-ups in Sri Lanka yet. But the market is opening up and there will more opportunities in the future.

#### What is the future of mobile for development services in Sri Lanka?

The education system in Sri Lanka is evolving. When I was in school, IT courses were not compulsory and there were no IT teachers either. Now the government has trained teachers to achieve their IT literacy target of 75% and made IT courses compulsory for every student. This is creating more interest in ICT in the country.

In the last two years, mobile developers have become interested in developing applications in the local context. Earlier there was no local language support for Android mobiles, but Sri Lankan developers overcame the problem and now there are more mobile apps in native languages. This is a good foundation for the mobile app industry in Sri Lanka.

# Spotlight: Sarvodaya-Fusion, NGO. In conversation with Harsha Liyanage, Isura Silva, Udara Dharmasena

#### What do you do at Sarvodaya-fusion?

We are a not-for-profit organisation with a mission of e-Empowerment of communities all around Sri Lanka, operating as a specialised program of a 54-year-old national charity called Sarvodaya. We operate as a social enterprise pursuing Social and Economic (double) bottom lines. One of our ventures, Fusion Education, is a package including examinations, a web seminar, an online assessment tool, and a certificate of completion that is run through telecentres in Sri Lanka. This is a product that customers pay for (the package costs 1,900 SLR), is something the corporates buy into to support their CSR objectives (e.g. Microsoft and HSBC), but also something that we can own. We have 1,400 users completing this per year, and we turn a profit on this product. On the mobile front, our projects are still at a prototype testing stage where we are pursuing business models that can emulate the success of Fusion Education.

# How is your social enterprise work related to mobile operators, and what is the value to them of partnering with you?

Mobile operators are looking for new ways of approaching rural customers, as this is different from customers in cities – a now largely a saturated market. The barrier for operators here is in understanding the rural communities and their traditions. While Sarvodaya has been working in the ICT sector since 1997, it has existed as a national charity for 54 years and has strong links within rural communities. This deep understanding and network within communities is the value we can bring to the operators. Very few NGOs are working on a social enterprise model, and the prospect of building business models in line with those of corporates is a big opportunity for us. The challenge is that we must ensure we don't invalidate the trust we have built up for many generations in these rural communities. It's also important to remember that this technology will move to the communities with or without us. We believe, with our involvement, we can influence the quality and content of those mobile products that will improve their social impact and sustainability.

#### Can you describe your experience working with mobile operators?

Sarvodaya-Fusion has experience working with two leading mobile operators, Dialog Axiata and Etisalat Sri Lanka. In the case of Etisalat, we found common ground in Android. Sarvodaya-Fusion had earlier experience, in 2011, with a project that shared Android Smart Devices within poor communities in order to improve their awareness and interaction with social media. This experience connected with Etisalat, who identified their new strategic projects with the Android platform. We agreed to form Android Village hubs: a collection of rural families in a village, where they learn about smart devices, social media and apps. Here Android tablets are being used by families in a pre-agreed time period for their livelihood purposes. As a CSR project, Etisalat provides the tablets and other resources to carry out the project, while Sarvodaya-Fusion implement training and monitoring activities. The project has influenced Etisalat's investment decisions into rural communities, especially in terms of 3G coverage. Both parties believe this will improve the broadband internet uptake, which will help e-Empowerment. Etisalat's CEO has been personally involved in brokering the partnership, and was also open to a non-exclusive partnership model that allowed for operator/network neutrality. Given the successful outcomes generated by our pilot project, we are now scaling this up into ten communities.

# **Appendix**

## Relevant groups and organisations:

Government bodies and trade associations:	<ul> <li>Information and Communication Technology Agency (ICTA)</li> <li>Sri Lanka Association of Software &amp; Service Companies (SLASSCOM)</li> <li>Ceylon Chamber of Commerce (ICT Steering Committee)</li> <li>Sri Lanka Board of Investment</li> </ul>
Business and	• SparkIT
entrepreneurship	• <u>Spiralation</u>
competitions:	Venture Engine (VE) Competition
	• Etisalat AppZone Champions
	• Etisalat Android Challenge
	<ul> <li>National Best Quality ICT Awards (NBQSA)</li> </ul>
	<ul> <li>Sri Lankan Entrepreneur of the Year</li> </ul>
	Youth Enterprise Awards
	<ul> <li>MIT AITI (Hosted by University of Moratuwa)</li> </ul>
Angels and venture	• <u>Lanka Angel Network</u>
capital:	Blue Ocean Ventures (BOV)

## Data: regulation, business, demographics and economics

	Sri Lanka	India	Bangladesh	UK
ICT regulation (1 = nonexistent, 7 = well developed)	4.4	4.4	3.0	5.4
Government emphasis on ICT (1 = weak priority, 7 = high priority)	5.5	5.1	5.0	5.6

Table 2: Sri Lanka, government and regulation

Source: Global ICT report 2011, World Economic Forum, Transparency International

2011	Sri Lanka	India	Bangladesh	UK
Venture capital availability(1 = very difficult; 7 = very easy)*	2.8	3.4	2.3	3.4
Impact of ICT on new products, services & business models (1 = not at all; 7 = significantly)*	4.8	5.0	4.0	5.9
Impact of ICT on access to basicservices (1 = do not enable accessat all, 7 = enable access)*	4.7	4.4	3.9	5.4
Corruption Perception Index 2012 (0 = highly corrupt, 100 = highly clean)	40	36	26	74
Ease of doing business rank**	96	132	129	7
Business entry density rate	0.58	0.09	0.10	10.41
Number of days to start a business	7	27	19	13

Table 3: Sri Lanka, business environment and entrepreneurship

Source: Global ICT report 2011, World Economic Forum (\*2011, \*\*2012)

Topic	2013 rank	2012 rank	Change
Overall ranking	81	96	15 👚
Starting a business	33	71	38 🕇
Dealing with construction permits	112	116	4 1
Getting electricity	103	104	1 1
Registering property	143	164	21 🕇
Getting credit	70	80	10 🕇
Protecting investors	49	46	-3 👃
Paying taxes	169	175	6 1
Trading across borders	56	54	-2 👃
Enforcing contracts	133	134	1 🛊
Resolving insolvency	51	49	-2 👃

 Table 4: Sri Lanka, ease of doing business, by topic

Source: World Ease of Doing Business Rankings

2011	Sri Lanka	South Asia	OECD
Population (million)	21	1,600	1,200
Urban population (%)	15%	31%	80%
Literacy rate*	91%	62%	98%
Median age (years)	31.1	25.0	38.0
Mobile penetration, connections	93%	71%	114%
Mobile penetration, subscribers	41%	27%	72%

Table 5: Sri Lanka, demographic data

Source: GSMA Intelligence, MDI analysis, World Bank (\*2010)

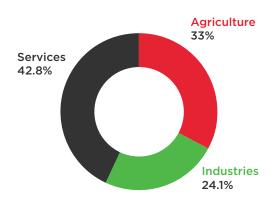


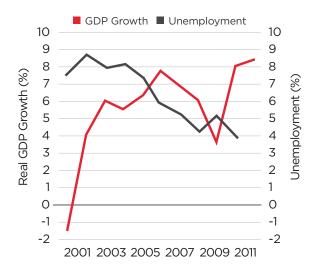
Figure 19: Employed population, by industry group (2011)

Source: Department of Census and Statistics, Sri Lanka

2011	Sri Lanka	South Asia	OECD
GDP growth	8.2%	6.1%	1.5%
GNI per capita	\$5,520	\$3,315	\$35,141
FDI (% of GDP)	2%	2%	2%
Unemployment*	5%	4%	8%
Inflation	7%	9%	3%

Table 6: Sri Lanka, economic data

Source: MDI analysis, World Bank (\*2010)



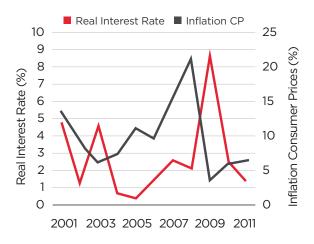


Figure 20: Sri Lanka, ecnomic data Source: MDI analysis, World Bank

### **Glossary**

#### **ICT** regulation

How would you assess your country's laws relating to the use of information and communication technologies (e.g., electronic commerce, digital signatures, consumer protection)? Key: 1 = nonexistent; 7 = well developed, 2010–2011 weighted average.

#### **Government emphasis on ICT**

How much priority does the government in your country place on information and communication technologies? Key: 1 = weak priority; 7 = high priority, 2010–2011 weighted average.

#### Venture capital availability

In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? Key: 1 = very difficult; 7 = very easy, 2010-2011 weighted average.

#### Impact of ICT on new products, services and business models

To what extent are information and communication technologies creating new business models, services, and products in your country? Key: 1=not at all; 7 = significantly, 2010–2011 weighted average.

#### Impact of ICT on access to basic services

To what extent are information and communication technologies enabling access for all citizens to basic services (health, education, financial services, etc.) in your country? Key: 1 = do not enable access at all, 7 = enable access significantly, 2010–2011 weighted average.

#### **Business entry density rate**

Recurring (service) revenue generated in the period, including revenue generated from the use of the network (voice, messaging, data, VAS), but excluding non-recurring revenue such as handset or equipment revenue.

#### Unique, active subscribers

Total unique users who have subscribed to mobile services at the end of the period, excluding M2M. Subscribers differ from connections such that a unique user can have multiple connections.

#### **Subscriber penetration rate**

Total subscribers at the end of the period, expressed as a percentage share of the total market population.

#### ARPU, by subscriber

Average revenue per user (ARPU). Total recurring (service) revenue generated per unique subscriber per month in the period. Different from ARPU by connection, ARPU by subscriber is a measure of each unique user's spend.

### **About GSMA Intelligence**

GSMA Intelligence is the definitive source of mobile operator data, analysis and forecasts, delivering the most accurate and complete set of industry metrics available.

Relied on by a customer base of over 800 of the world's leading mobile operators, device vendors, equipment manufacturers and financial and consultancy firms, the data set is the most scrutinised in the industry.

With over 13 million individual data points (updated daily), the service provides coverage of the performance of all 1,140 operators and 1,153 MVNOs across 3,505 networks, 65 groups and 236 countries worldwide.

The GSMA Intelligence team comprises 30 analysts based worldwide. It is led by Tom Johnson — Head of GSMA Intelligence — and Hyunmi Yang — GSMA's Chief Strategy Officer.

For more information, visit gsmaintelligence.com/about/

### About the authors



Neha Jain — Analyst

Neha joined GSMA Intelligence in early 2013, after having spent over 4 years as an economic researcher at organizations such as Deloitte, Government of India and Harvard Business School. Neha has a keen interest in telecom and M4D trends in developing markets. Neha holds a BA (Honours) degree in Economics from Delhi University, India and a Master's degree in Economics from Boston University, USA.



Tim Hatt — Senior Analyst

Tim is the head of research for emerging markets at GSMA Intelligence, having joined the group in October 2012. In this capacity, Tim has responsibility for the team producing research reports and presenting externally at conferences and public speaking engagements. Prior to joining the GSMA, Tim spent 6 years in London as an analyst covering telecoms and a variety of other sectors.



Adam Wills — Analyst

Adam joined GSMA in November 2012. His responsibilities on 'Scaling Mobile' included leading on multiple report sections, presenting work to external stakeholders in Africa, and conducting interviews to generate a range of supporting case studies. Prior to GSMA Adam conducted policy research in an MP's parliamentary office, with a focus on environment and international development.

mobiledevelopmentintelligence.com • mdi@gsma.com • @GSMAm4d gsmaintelligence.com • info@gsmaintelligence.com • @GSMAi

Whilst every care is taken to ensure the accuracy of the information contained in this material, the facts, estimates and opinions stated are based on information and sources which, while we believe them to be reliable, are not guaranteed. In particular, it should not be relied upon as the sole source of reference in relation to the subject matter. No liability can be accepted by GSMA Intelligence, its directors or employees for any loss occasioned to any person or entity acting or failing to act as a result of anything contained in or omitted from the content of this material, or our conclusions as stated. The findings are GSMA Intelligence's current opinions; they are subject to change without notice. The views expressed may not be the same as those of the GSM Association. GSMA Intelligence has no obligation to update or amend the research or to let anyone know if our opinions change materially.

© GSMA Intelligence 2013. Unauthorised reproduction prohibited.

Please contact us at info@gsmaintelligence.com or visit gsmaintelligence.com. GSMA Intelligence does not reflect the views of the GSM Association, its subsidiaries or its members. GSMA Intelligence does not endorse companies or their products.

GSMA Intelligence, 5 New Street Square, New Fetter Lane, London EC4A 3BF